

REMARKS

Claims 8, 9, 22, 24 and 27 are now rejected under 35 U.S.C. 103 as unpatentable over Gordon et al. in view of Wich, both previously of record. According to the statement of the rejection at page 2, Gordon et al. shows the valve but does not disclose how the fuel pressure is regulated to inject fuel at a desired time and duration and that Gordon et al. has a surface 17 which is adjacent a step and "fairly responds to the claimed recitation of a guide surface". The reference to Wich has been cited for showing a fuel injector system which uses a solenoid valve to regulate fuel pressure to the injector which is actuated by fuel pressure in the same manner as Gordon et al. It is stated that it would have been obvious for one of ordinary skill in the art to use such a solenoid valve with the injector of Gordon et al. to regulate fuel pressure and that such a combination could reasonable be described as "an electrically actuated or activator (injector) valve".

In response to previously filed arguments in the Amendment of March 5, 2004, the Examiner has indicated that the remarks were not persuasive with respect to this particular rejection because the flow of Gordon et al. is homogenous which can "reasonable be considered free of cavitation". Thus Gordon et al. meets the claim according to the rejection. Furthermore, it has been indicated in the rejection that claims 8 and 22 do not recite an electrically activating device so that using a solenoid pilot valve as taught by Wich is suggested by the references.

Applicants traversal of the rejection is based on the limitations of claims 8 and 22 with respect to the flow optimizing guide surface which is configured to avoid "cavitation resulting from said flow through said valve". According to the specifics of the claim the guide surface is designed not to provide continued smooth flow but to avoid cavitation resulting from said flow through said valve. It is quite clear if there is no cavitation that ever results from flow through the valve, as apparently is the case in the Gordon et al., reference, then there is no need and there is no guide surface which is "configured" to avoid the cavitation which resulted from the flow through the valve. Each of independent claims 8 and 22 contain this specific limitation with respect to the flow optimizing guide surface and it submitted that one skilled in the art would not modify Gordon et al. to provide such a device because, as indicated previously, there is no cavitation to be avoided based on the description of Gordon et al. itself.

In a second aspect of Applicants traversal it is submitted that the presently claimed invention calls for an electrically activated valve in the preamble and that the preamble may not be ignored particularly when the rejection is based on a combination of references. Still further, the secondary reference to Wich '232 provides intermittent pressurized pulses of fuel flow through the use of a solenoid control bypass valve. The system of Gordon et al. in contrast has been provided with modifications to the injection hole and the supply conduit to provide a uniform stream in response to opening by fluid pressure. Such consideration are not appropriate with respect to pulsating fluid

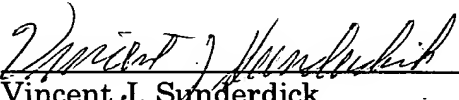
provided by the system of Wich. Claims 8 and 22 each require that the activating device provide a "force in a direction opposite the valve spring to move the valve in the housing". It is not seen how the electrically activation device of Wich can provide such a result and, as indicated above, because of the considerations with respect of the uniform stream in Gordon et al. it is not obvious that pulsating fluid provided by Wich would provide any teaching with respect to the combination required by the Examiner. Therefore it is submitted that claims 8 and 22 provide structure which is not obvious from the combination of Gordon et al. and Wich either with respect to the specific configured guide surface or the function and operation of the activating device in order to provide an electrically activated valve of either independent claim 8 or independent claim 22.

Therefore, Applicants strenuously renew their request for reconsideration and allowance of this application containing claims 8, 9, 22, 24 and 27.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #038738.48700US).

Respectfully submitted,



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